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DATE MAILED: 07/17/2006

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,838	03/24/2004	John W. Lundstrom		6716
7	590 07/17/2006		EXAM	INER
	W. LUNDSTROM KRAMSKAYA, MARINA ESTVIEW DR.		A, MARINA	
GLENDORA,			ART UNIT	PAPER NUMBER
,			2858	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary    Examiner
Examiner Marina Kramskaya 2858  - The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filled shert SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will explice XIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will explice XIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will explice XIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will explice XIX (6) MONTHS from the mailing date of this communication to become ABANDONED (35 U.S.C. § 139).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status  1) □ Responsive to communication(s) filled on Q4/25/2006.  2a) □ This action is FINAL. 2b) □ This action is non-final.  3) □ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) □ Claim(s) □ is/are pending in the application.  - Ap) Claim(s) □ is/are allowed.  - (a) □ Claim(s) □ is/are rejected.  - (b) □ Claim(s) □ is/are rejected.  - (c) □ Claim(s) □ is/are rejected to by the Examiner.  - (c) □ The drawing(s) filed on □ is/are: a) □ accepted or b) □ objected to by the
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D
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.
Priority under 35 U.S.C. § 119
12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No
3. Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
Attachment(s)
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application (PTO-152)  Compared to the provided HTML of the provided HTML o

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### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 5-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Cramer et al., US 6,401,742.

As per Claim 5, Cramer discloses a conductive metallic (column 4, lines 60-62) soil penetrating electrode (combination of **31 & 33**) for use in making an electrical connection with the soil for the purpose of measuring soil electrical parameters (electrical potential: column 2, line 17), which has a long, small angle conical part (probe tip **31**) that permits totally intimate electrical contact with the soil as the electrode is driven in (into soil **52**, as in FIG. 6).

As per Claim 6, Cramer discloses a conductive metallic (column 4, lines 60-62) soil penetrating electrode (combination of **31 & 33**) for use in making an electrical

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connection with soil for the purpose of measuring soil electrical parameters (electrical potential: column 2, line 17), which has a long, small angle conical part (probe tip 31) that permits totally intimate electrical contact with the soil, and which has a shaft (34-35) that is undercut from the major diameter of the conical part forming a shoulder, said undercut preventing any additional electrode contact (i.e. 34 is insulated therefore prevents electrode contact) area with the soil should the electrode be inadvertently driven deeper than the length of said conical part.

As per Claim 7, Cramer discloses a conductive metallic soil penetrating electrode as described in Claim 6, and further discloses a shaft (34) formed by an undercut section at the major diameter of the conical part, said undercut forming a shoulder that can be used as a gauge showing when the electrode has been driven to the correct depth in the soil (i.e. the electrode cannot be driven in part the cable 35; therefore the insulated portion 34 is a gauge for depth).

## Response to Arguments

- 3. Applicant's arguments filed 11/28/2005 have been fully considered but they are not persuasive.
- 4. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the particular angle of the conical electrode) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the

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specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

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- 5. In response to applicant's argument that one of ordinary skill in the art would not recognize the electrode of Cramer as having a substantially conical shape, the examiner points out that the so called "bulled-shaped" electrode is substantially conical. The electrode, as taught by Cramer, has a small conical taper as well. The average angel of 38 degrees is considered "small" by the examiner, since no special definition for a small angle has been provided.
- 6. In response to the applicant's argument that the electrode does not allow for intimate contact with the soil, the examiner respectfully disagrees. Figure 6 clearly illustrates that the electrode is in intimate contact with the soil, as evidenced by the probes ability to send accurate electrical signals to the control unit descriptive of the soil properties (see Cramer, column 4, lines 37-46). The degree of intimacy in contact with the soil in not claimed. Hence the claimed limitation of "intimate contact" with the soils is met by the teaching of Cramer.
- 7. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., radio frequency measurements) are not recited in the rejected claim(s). Only the structure and shape of the electrode has been claimed. The type of measurements that the electrode may be used for are not recited in the claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

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#### Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marina Kramskaya whose telephone number is (571)272-2146. The examiner can normally be reached on M-F 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on (571)272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Marina Kramskaya

Examiner Art Unit 2858

MK

SUPERVISORY PATENT EXAMINER